

MINER ν A Operations Report

All Experimenters' Meeting

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MINERvA Shifts



- As last week, running weekday day shifts for about 5 – 8 hours
 - Since the CROC-E installation, only the experts have been operating DAQ
 - All FEBs (front end boards) & PMTs operating
- Will run 24 hour shifts when start we get NuMI beam
 - However, we will cancel non-day shifts if there is no NuMI beam.



CROC-E Upgrade



- Old CROCs were replaced by the CROC-E boards Jun 12-13; all CROC-Es work, no problem seen:
 - Detector being read out with no light-tight problems
 - With old CROCs, the DAQ needed 3 computers. The CROC-E DAQ is fast enough that the DAQ needs only 1 computer
- Some minor problems in online monitoring:
 - gmBrowser (online monitor program) needs rebuild with version of ROOT matching new DAQ
 - Two light injection (LI) boxes need two serial connections. New single readout computer only has one; various solutions being discussed
- Networking upgrade caused no problems



New DAQ Computers



- Will be replacing 3 online DAQ computers with 4 new DAQ computers
 - Right now, we are reading out the CROC-E with the old DAQ computers
 - Geoff Savage has installed two computers in DAQ rack, later will add another two in VETO rack
 - New computers cannot be powered on for unattended operation until ORC for rack is approved
- Also, Geoff is working on upgrading computers in 12th floor control room
 - 4 new computers in hand
 - Need configuration and installation of software before usable in control room



PMTs



- Our PMT Box test stand in Lab G is full operational.
 - Tests cross talk & light tightness of PMT boxes
- Previously, we pulled tubes off the detector with the HV varying problem
 - HV periodically varies 10-20 volts around its set value
 - PMTs get HV through a Cockcroft-Walton on the base
 - In fact for the last 2 years it has been our only PMT box failure
 - Taken 3 PMT boxes with this problem & replace their inner part (base and cables), but not the PMT
 - 2 pass test stand QC, third needs further investigation
 - PMT varying problem does not show up on the test stand (though may be matter of PMT box orientation)



PMTs



- Last Thursday, we replaced 2 PMT boxes with these PMT boxes to see if they are fixed
 - 1st row east side, outer detector (OD),
 - Easiest place to install; can be done while looking at what you are doing.
 - Its OD so that if the HV varies, not such a problem
 - Boxes are fairly easy to replace if there is a problem.
 - Also important as training for people to replace PMT boxes on detector.
 - Steve Chappa, Roberto Davila, & Kevin Kuk
- Replacement went fairly easily, but did knock adjacent FEB which had to be reseated



Muon Monitor 4



- Gas lines and HV cables have been run to MM 4
 - Upstream portion of gas delivery still needs work
- Need 3 readout bundles, each consisting of 30 RG174 cables to be installed in the alcove.
 - 1 bundle installed; 2 others being assembled and/or need installation
 - Hope to have all cables in place by end of this week
- Last Wednesday had first ORC review of MM 4 electronics rack; plan to address issues noted by Steve Chappa and have final review next week
- First SWIC scanner to have Ethernet readout